

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) An occupant determination device for a vehicle seat comprising:

a load sensor provided at a seat body;

a controller for calculating a detection load value based on a load value output from the load sensor and for determining an occupant sitting on the vehicle seat by comparing the detection load value and a predetermined threshold value;

a determining means for determining whether or not a child restraint system is equipped on the vehicle seat based on a variation of the detection load value; and

a detecting means for detecting whether or not the vehicle is stopped; wherein
when the detecting means detects that the vehicle is stopped the determining means determines whether a child restraint system is equipped on the vehicle seat,
and when the detecting means detects that the vehicle is not stopped the
determining means does not determine whether a child restraint system is equipped
on the vehicle seat ~~when a vehicle stop condition is not detected by the detecting means, the determining means does not determine whether or not the child restraint system is equipped on the seat.~~

2. (Original) An occupant determination device according to claim 1, wherein the detecting means detects the vehicle stop condition based on at least one of an ignition switch signal, a shift position signal, a parking switch signal, a courtesy switch signal, and a vehicle speed pulse.

3. (Original) An occupant determination device according to claim 2, wherein the determining means determines whether or not the child restraint system is equipped on the vehicle seat based on the variation of the detection load value from a maximum detection load value detected after a seatbelt is fastened.

4. (Currently Amended) An occupant determination device for a vehicle seat comprising:

a plurality of load sensors provided at a seat body,

a controller for calculating a detection load value by summing up load values output from the plurality of load sensors and for determining an occupant sitting on the vehicle seat based on the detection load value;

a determining means for determining whether or not a child restraint system is equipped on the vehicle seat based on a variation of the detection load value; and

a detecting means for detecting whether or not the vehicle is stopped; wherein when the detecting means detects that the vehicle is stopped the determining means determines whether a child restraint system is equipped on the vehicle seat, and when the detecting means detects that the vehicle is not stopped the determining means does not determine whether a child restraint system is equipped on the vehicle seat ~~when a vehicle stop condition is not detected by the detecting~~

~~means, the determining means does not determine whether or not the child restraint system is equipped on the seat.~~

5. (Original) An occupant determination device according to claim 4, wherein the detecting means detects the vehicle stop condition based on at least one of an ignition switch signal, a shift position signal, a parking switch signal, a courtesy switch signal, and a vehicle speed pulse.

6. (Original) An occupant determination device according to claim 5, wherein the determining means determines whether or not the child restraint system is equipped on the vehicle seat based on the variation of the detection load value from a maximum detection load value detected after the seatbelt is fastened.

7. (Original) An occupant determination device according to claim 1, wherein the controller is connected to an ignition switch and a seatbelt switch.

8. (Original) An occupant determination device according to claim 7, wherein when the ignition switch is determined to be ON, or the seatbelt switch is determined to be not fastened, or the child restraint system is determined not to be equipped on the vehicle seat, it is determined whether an occupant sitting on the seat is an adult or a child.

9. (Original) An occupant determination device according to claim 8, wherein when the detection load value is equal to or greater than the predetermined threshold value, it is determined that the occupant sitting on the seat is an adult.

10. (Original) An occupant determination device according to claim 9, wherein when the detection load value is smaller than the predetermined threshold value, it is determined that the occupant sitting on the seat is a child.

11. (Original) An occupant determination device according to claim 4, wherein the controller is connected to an ignition switch and a seatbelt switch.

12. (Original) An occupant determination device according to claim 11, wherein when the ignition switch is determined to be ON, or the seatbelt switch is determined to be not fastened, or the child restraint system is determined not to be equipped on the vehicle seat, it is determined whether an occupant sitting on the seat is an adult or a child.

13. (Original) An occupant determination device according to claim 12, wherein when the detection load value is equal to or greater than the predetermined threshold value, it is determined that the occupant sitting on the seat is an adult.

14. (Original) An occupant determination device according to claim 13, wherein when the detection load value is smaller than the predetermined threshold value, it is determined that the occupant sitting on the seat is a child.

15. (New) An occupant determination device according to claim 1, the detecting means detects whether or not the vehicle is stopped based on a status of an ignition switch.

16. (New) An occupant determination device according to claim 4, the detecting means detects whether or not the vehicle is stopped based on a status of an ignition switch.

17. (New) An occupant determination device for a vehicle seat comprising:
a plurality of load sensors provided at a seat body;
a controller for calculating a detection load value by summing up load value outputs from the plurality of load sensors and for determining an occupant sitting on the vehicle seat based on a variation of the detection load value;

a determining means for determining whether or not a child restraint system is equipped on the vehicle seat based on a variation of the detection load value;

a detecting means for detecting a vehicle stop condition based on a status of an ignition switch; and

a seatbelt switch for detecting whether or not a seatbelt is fastened, wherein
when the detecting means detects the vehicle stop condition and the seatbelt switch detects that the seatbelt is fastened, the determining means determines whether a child restraint system is equipped on the seat.

18. (New) An occupant determination device according to claim 17, wherein when the detecting means determines that the vehicle is not stopped or the seatbelt switch detects that the seatbelt is not fastened, it is determined whether an occupant sitting on the seat is an adult or a child.

19. (New) An occupant determination device according to claim 17, wherein when the detecting means detects the vehicle stop condition, the seatbelt switch detects that the seatbelt is fastened and the determining means determines that the child restraint system is not equipped on the vehicle seat, it is determined whether an occupant sitting on the seat is an adult or a child.

20. (New) An occupant determination device according to claim 17, wherein when the detecting means detects that the vehicle is not stopped the determining means does not determine whether a child restraint system is equipped on the vehicle seat.